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THOMAS F. LUCY'S "UPPER SUSQUEHANNA FLORA" HERBARIUM REDISCOVERED

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ABSTRACT

Thomas F. Lucy's original herbarium of "The Upper Susquehanna Flora," fully mounted and labeled for the Elmira Academy of Sciences in the 1890's, has been found at Elmira College. Although *Index Herbariorum* indicates that BUF contains the largest deposit of the collections of T. F. Lucy, these specimens are Lucy's unmounted duplicates. T. F. Lucy did not die in Elmira, as earlier reported, but had moved to Buffalo and died there in 1906. Based on Lucy's collection, a working herbarium has been established in Carnegie Science Hall at Elmira College. Current research is focusing on updating Lucy's obsolete nomenclature, mapping the localities and collection sites, and identifying the duplicate specimens from BUF.

Key Words: Thomas Francis Lucy, The Upper Susquehanna Flora, Elmira Academy of Sciences, Elmira College Herbarium, New York

INTRODUCTION

In 1984 we discovered an herbarium in a storage room in the Kolker Science Building at Elmira College, Elmira, New York (Long et al., 1987). Close examination revealed that most of the 2200 specimens were collected by Thomas F. Lucy, M.D. Heading Lucy's meticulously detailed, handwritten labels was the typeset title, "The Upper Susquehanna Flora, Elmira Academy of Sciences." We began our investigation by consulting Barnhart's (1965) Biographical Notes upon Botanists.

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THOMAS FRANCIS LUCY

Thomas Francis Lucy was born in Worcester, England, on 7 June 1844 (Chi Phi Centennial Memorial Vol., 1924), the son of Henry and Sarah Hook Lucy (Bureau of Vital Statistics-Buffalo, 1906). At the time of the 1860 U.S. Census, Lucy, his mother, and two siblings were living in Corning, NY. At age 21, he attended Hobart College, Geneva, NY (Catalogue of Hobart College, 1865-66), and received his M.D. from the Eclectic Medical College in New York City at age 37 (Weaver, 1890). Lucy married, moved to Chemung County and at the time of the 1880 Census was settled in Elmira, NY. Upon examining the Elmira City Directories, we found that Lucy was listed as a physician in 1887. Between 1881 and 1889 he was a member of the American Society of Microscopists (Weaver, 1890; Chi Phi Centennial Memorial Vol., 1924), the Genesee Valley Eclectic Medical Society (Weaver, 1890) and the Elmira Academy of Sciences (1881). Sometime around 1900 Lucy moved out of Elmira; we found him listed in the 1901 Buffalo City Directory. Lucy died in Buffalo on 29 October 1906 of Bright's Disease (Bureau of Vital Statistics-Buffalo, 1906). A detailed biography is currently in preparation.

THE LUCY COLLECTIONS

From Index Herbariorum (Chaudhri et al., 1972) we learned that Lucy's collections should be housed in the Field Museum of Natural History in Chicago (F), the University of Minnesota Herbarium (MIN), the Herbarium of the New York Botanical Garden (NY), and the New York State Museum Herbarium (NYS). The Index lists the Buffalo Museum of Science (BUF) as the main repository for his collection, but does not mention Elmira College. We visited BUF in March, 1986, and found what appeared to be unmounted duplicates of the specimens we had found at Elmira College. These specimens were still in the original newspapers used by Lucy and tied into bundles. Within each bundle, numbers were found penciled along the edges of some newspapers. In most cases this number was the only identification of a particular specimen and of the next few un-numbered specimens. To the curators at BUF, these numbers had no significance. Comparison of these numbers with the Patterson (1892) and Heller (1898) check-list numbers found on the herbarium labels of the Elmira College

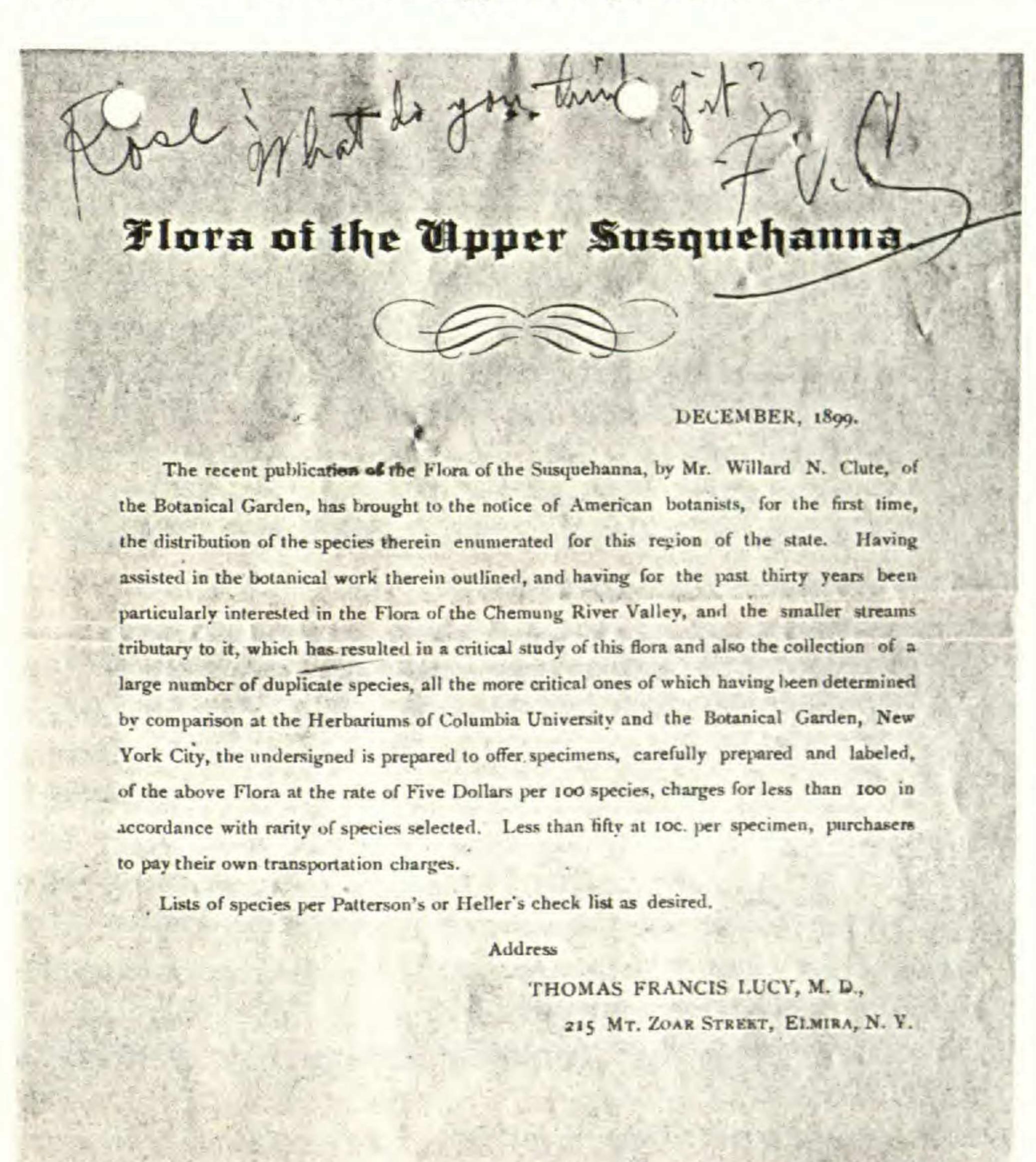


Figure 1. Photocopy of the flyer distributed in 1899 advertising for sale, at the rate of five dollars per 100 species, duplicate specimens of the Flora of the Upper Susquehanna, listed per Patterson's or Heller's check list (Smithsonian Institution Archives).

specimens verified that most of the numbers used in the BUF collection referred to Patterson's Check List. Apparently Lucy was using the Patterson and Heller numbers as a shorthand reference to his duplicate specimens. Some label information was found within these bundled specimens, but it was incomplete. Most specimens contained no label information at all. With some of the specimens, Lucy had placed a small slip of paper with the

location and date written in an abbreviated form. For locations in the city of Elmira or Sullivan Hill, he would write "city" or "Sul." For the most part, the dates appear as "1886" or "86." The few completed labels found with the specimens at BUF varied in design and did not have the extensive information that we found so frequently in the collection at Elmira.

Labels found at MIN and at the Smithsonian Institution herbaria (US) were similar to those located at BUF. According to the old record books at MIN, the herbarium received 266 specimens from Lucy between 1895 and 1898. Gerald B. Ownbey, former curator at MIN, believes that these specimens were sent unmounted since the specimens are mounted on paper used at MIN in the 1890's. "The labels are . . . the ones that came with the specimens and are unaltered" (letter from G. B. Ownbey to C. Long, 4 Nov., 1986). The specimens found at US had been acquired through an exchange with NY. These specimens had also been mounted on paper used at US. Inquiries to the archives of MIN, NY, NYS and BUF could not supply us with any additional information, but a reply from the archivist at US clarified the reason why so many duplicates were found at BUF. Among the documents received was a printed flyer dated December 1899, advertising that Lucy had for sale duplicate specimens from the Flora of the Upper Susquehanna (Figure 1). These specimens, Lucy indicated in the flyer, could be referenced to "Patterson's or Heller's check-list as desired" (Smithsonian Institution Archives). On the basis of the knowledge of this flyer and our research revealing that Lucy had moved to Buffalo ca. 1900 and died there in 1906, we confirmed our belief that the specimens at BUF were indeed Lucy's duplicates.

THE UPPER SUSQUEHANNA FLORA

When Willard Nelson Clute started working on his Flora of the Upper Susquehanna and its Tributaries (1898), nothing had been published on the flora around the headwaters of the Susquehanna River. For help with his floristic survey, Clute turned to the botanists of the area: W. C. Barbour, S. A. Brown, F. V. Coville, F. E. Fenno, J. A. Graves, D. F. Hoy, C. F. Millspaugh, and T. F. Lucy. The Flora of the Upper Susquehanna was important as it was the "connecting link between the 'flora of the Lackawanna and Wyoming Valleys' [Dudley and Thurston, 1892] and the

'Cayuga Flora' [Dudley, 1886] and thus complet[ed] the chain of local floras extending from eastern Pennsylvania to Lake Ontario' (Clute, 1898). Its preface stated that Lucy devoted 30 years to collecting plant specimens of the Chemung Valley, and toward the end of the 1890's, Lucy presented to the Elmira Academy of Sciences "a nearly complete collection of the plants of our region" (Clute, 1898). This "nearly complete collection" is the one now in our possession.

THE ELMIRA ACADEMY OF SCIENCES

The Elmira Academy of Sciences was established in 1861 as a society for "the pursuit of astronomical and scientific studies" (Elmira Academy of Sciences, 1881). It was housed in the Observatory (Figure 2), which was located across from the Elmira Female College (name changed to Elmira College in 1890; Barber, 1955). In 1881, the Elmira Academy of Sciences "turned the observatory over to the [Elmira Female] college, complete with its excellent equipment and a wonderul heritage" (Barber, 1955). The Forty-Fourth Annual Catalogue of Elmira College (1898-99) reports that the Observatory also contained a museum which housed many natural history collections. It may have been in the Observatory's museum that the plant collection was originally housed. According to the charter of the Elmira Academy of Sciences (1881, 1897), Lucy was the chairman in its Section of Botany. The first mention that the College has an herbarium of plants of "Elmira and vicinity" is found in the Forty-Fifth Annual Catalogue of Elmira College (1899-1900) as a description for the "new museum" under the heading for Botany. This same entry reports that an additional "large exhibit is expected in the near future." We assumed this "large exhibit" was the collection Lucy gave to the Elmira Academy of Sciences. The 1900 Sibyl, then Elmira College's news magazine, and a letter dated "Oct 6-1900" from Lucy to Charles Peck, State Botanist, Albany, NY, confirmed our assumption. The Sibyl provided us with a full description of this "new museum" and its founder, Dr. Darius R. Ford. "The collection in botany" is described as having specimens which "are beautifully mounted, and are classified and determined after the latest botanical nomenclature. The principle [sic] collection is due to the interest of Dr. T. F. Lucy, of Elmira, . . . " (Brooks, 1900). The Lucy letter states, "There are probably over

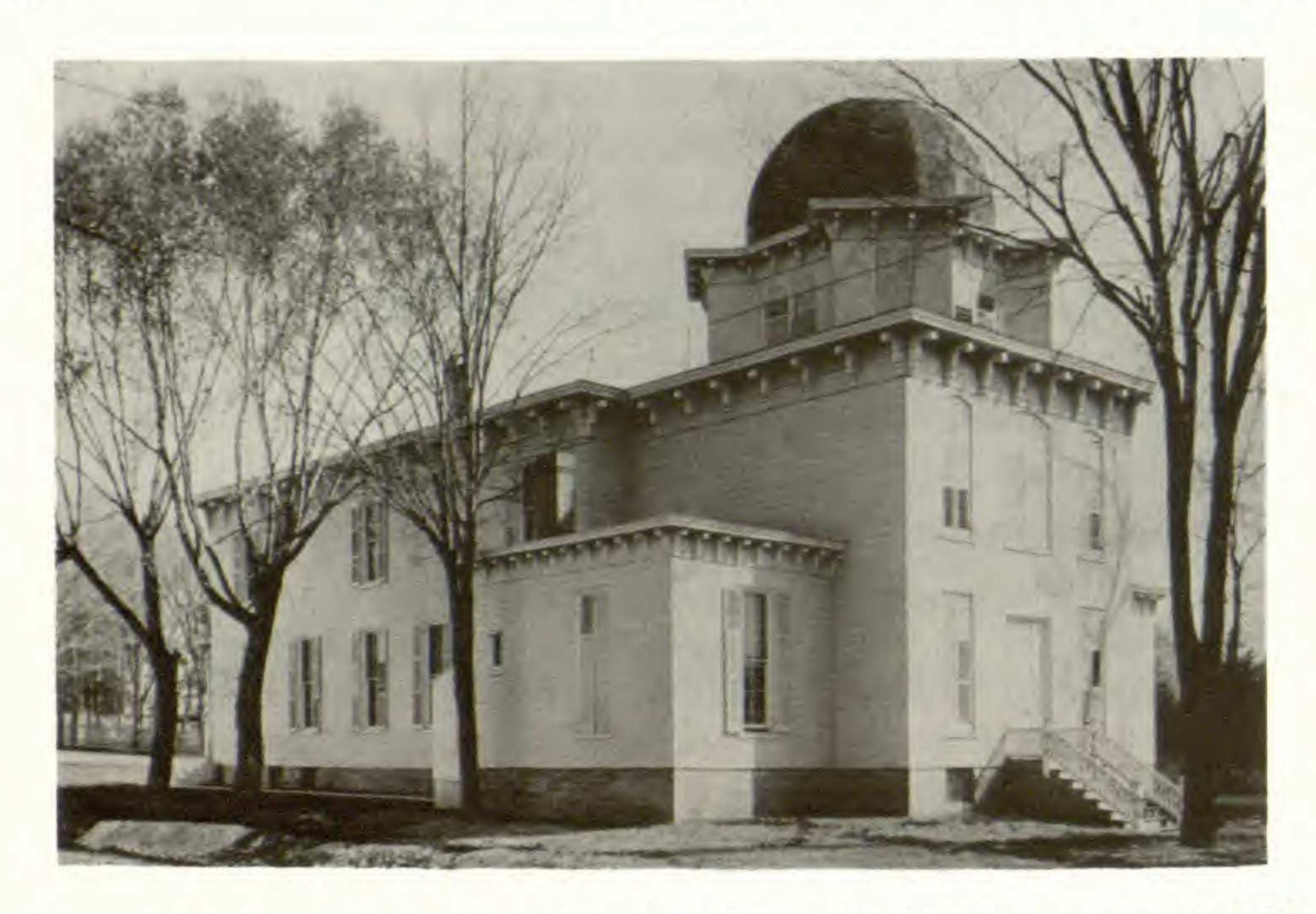


Figure 2. Photograph of the Elmira Academy of Sciences' Astronomical Observatory, begun in 1858–59, and located across from the Elmira Female College. The Academy held their meetings in the Observatory building. In 1881 the building was turned over to the college; it was razed in 1939.

1500 mounted sheets now deposited in the Ford museum at Elmira [College]." We presume that prior to the Observatory's razing in the summer of 1939 (Pott, 1939), the rest of the contents of the Observatory's museum was moved to the Ford Museum in Gillett Hall (Forty-Fifth Annual Catalogue of Elmira College, 1899–1900), the music building of the Elmira Female College. The Ford museum is no longer in existence, and how the herbarium collection came to be housed in the Kolker Science Building is yet unknown. However, we assume that the herbarium was brought to Kolker shortly after the building was erected in the 1950's.

Of the 2200 specimens in the collection found in Kolker, 1160 were collected by Lucy. These specimen labels have quite extensive information. Along with the collection number, scientific name, locality, habitat, geographical distribution and date, Lucy included cross references to Britton and Brown's (1896–98) first edition of an *Illustrated Flora*; Patterson's (1892) Numbered Checklist; Heller's (1898) numbers from the Catalogue of North American Plants; and finally (in the bottom right hand corner) the number from Durand's (1887) Index Generum Phanerogamorum

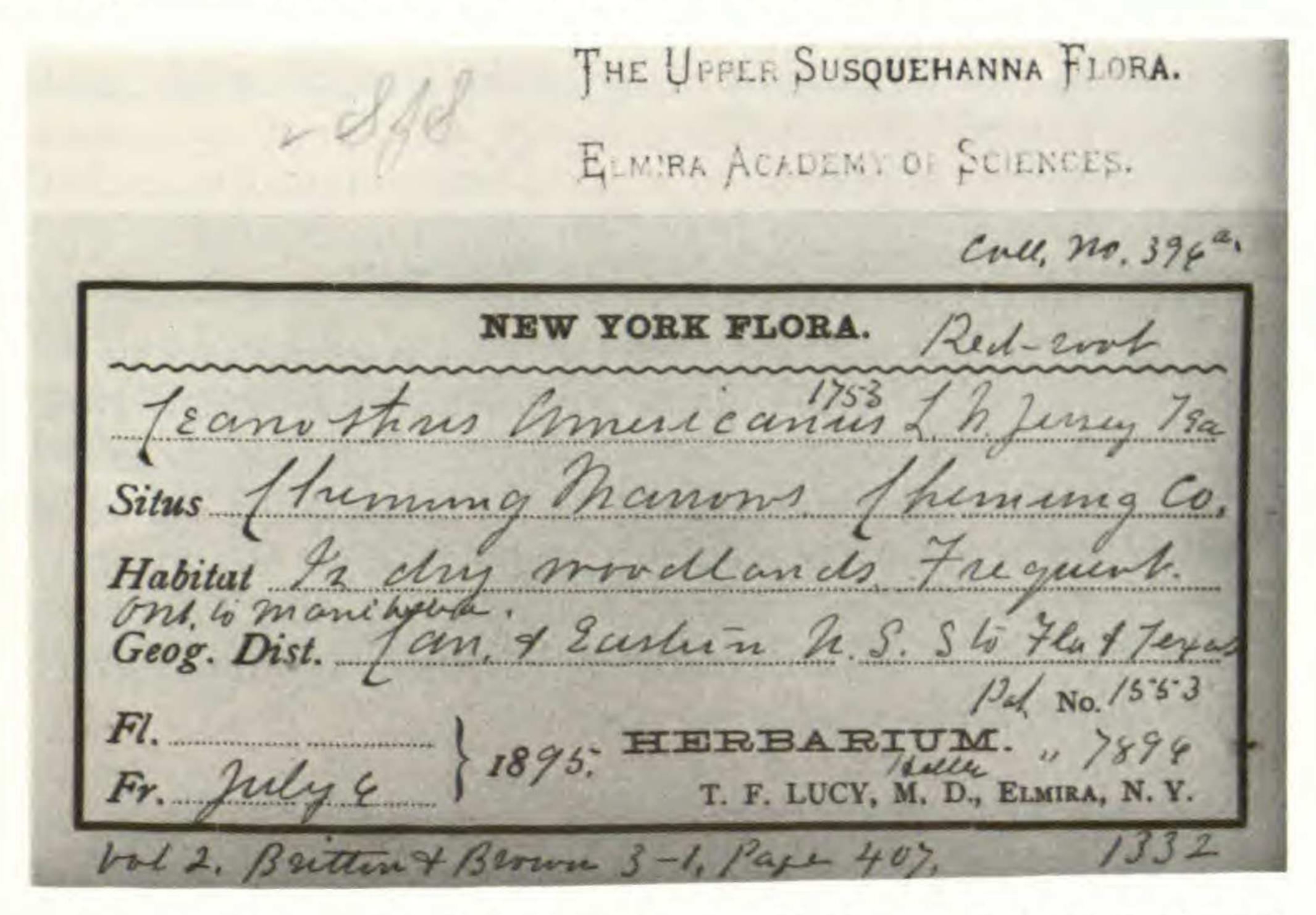


Figure 3. Photograph of a typical label found in the Lucy herbarium collection at Elmira College. Lucy's collection number appears on the upper right of the label. The Patterson (1892), Heller (1898) and Durand (1887) numbers appear on the lower right. Across the bottom of the label is found reference to the first edition of Britton and Brown (1896–98). Note the typeset title above the label, The Upper Susquehanna Flora, Elmira Academy of Sciences, and the annotation initials of Stanley J. Smith to the left of title.

(Figure 3). As if this were not enough, other information such as synonyms, subspecies, varieties, and the common name were often recorded around the borders and squeezed in between the lines.

Another interesting aspect of the Academy's collection was the multiple labels found on some of the specimens. When Lucy mounted a specimen collected by another botanist, he always affixed his own label in the lower right corner, complete with information and cross-referencing (but excluding the collection number) and placed the original collector's label in the lower left. In some cases where specimens of the same species were collected separately by two botanists, the plants were mounted together on one sheet and a third label was added to the top right corner of the herbarium sheet. Additionally, in 1945, either annotation labels or handwritten initials (Figure 3) of Stanley J. Smith (who became curator of NYS), were affixed above or to the left of Dr. Lucy's labels. Apparently, Smith, then a graduate student at Cor-

nell, studied and reclassified many of the specimens in Lucy's collection (Anon, 1945a, 1945b).

THE ELMIRA COLLEGE HERBARIUM

The Academy's herbarium collection has been relocated to the newly established Elmira College Herbarium in Carnegie Hall. This collection has been extensively renovated, alphabetized by family, and repaired where needed. Label information has been compiled on a computer database (IBM PC-File III) for easy reference. The collection has been housed along with collections of New York State flora, donated by Dr. Peter Hyypio, former curator of the Bailey Hortorium (BH) at Cornell University, Dr. Herman Forest, curator of the Herbarium of SUNY Geneseo (GENU), as well as by Elmira College students.

The Elmira College Herbarium is currently used as both a research and a teaching herbarium. Along with curating the existing collection, current research by both undergraduate and graduate students is focusing on updating the obsolete nomenclature, mapping the localities of the collection sites, identifying the specimens from BUF, and incorporating many of them into the Elmira College Herbarium. We welcome use of this resource by other botanists.

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LITERATURE CITED

ANON. 1945a. College herbarium, Dr. Lucy's project, gains recognition. The Octagon, 17 January. 28(13): 1.

ANON. 1945b. Cornell professors reclassify thirty herbarium plants. The Octagon,

14 February. 28(15): 4.

BARBER, W. C. 1955. Elmira College: The First 100 Years. McGraw-Hill Book Co. Inc., New York.

BARNHART, J. H. 1965. Biographical Notes Upon Botanists. Vol. 2. G. K. Hall

and Co., Boston, MA.

BRITTON, N. L. AND A. BROWN. 1896-1898. An Illustrated Flora of the Northern United States, Canada and the British Possessions. Vols. I, II, III. Charles Scribner's Sons, New York.

Brooks, C. L. 1900. The Ford Museum and its founder. The Sibyl XXIX(4):

215-220.

BUREAU OF VITAL STATISTICS-BUFFALO, NY. 1906. Certificate and record of death. Thomas Francis Lucy.

CATALOGUE OF HOBART COLLEGE, GENEVA, N.Y. 1865-66. Edgar Parker, Printer. CHAUDHRI, M. N., I. H. VEGTER AND C. M. DEWAL. 1972. Index Herbariorum: Part II (3) Collectors. A. Oosthoek's Uitgeversmaatschappij N.V., Utrecht.

CHI PHI CENTENNIAL MEMORIAL VOLUME. 1924. Upsilon Chapter.

CLUTE, W. N. 1898. Flora of the Upper Susquehanna and Its Tributaries. Willard

N. Clute and Co., Binghamton, NY.

DUDLEY, W. R. 1886. The Cayuga flora. Part I: A Catalogue of the Phaenogamia growing without cultivation in the Cayuga Lake Basin. Bulletin of the Cornell University (Science). Vol. II. Andrus and Church, Ithaca, NY.

AND C. O. THURSTON. 1892. A Catalogue of the Flowering Plants and Vascular Cryptogams, Found in and Near Lackawanna and Wyoming Val-

leys. E. B. Yordy, Book and Job Printer, Wilkes-Barre, PA.

DURAND, T. 1887. Index Generum Phanerogamorum. Dulau and Co., London. ELMIRA ACADEMY OF SCIENCES. 1881. Charter, constitution and by-laws: with a list of the members, etc. O. H. Wheeler Printer, Elmira, NY.

——. 1897. Charter, constitution and by-laws: with a list of the members, etc.

Gazette Company, Book and Job Printers, Elmira, NY.

THE FORTY-FOURTH ANNUAL CATALOGUE OF THE OFFICERS AND STUDENTS OF Elmira College. 1898-1899. Elmira, NY.

THE FORTY-FIFTH ANNUAL CATALOGUE OF THE OFFICERS AND STUDENTS OF Elmira College. 1899-1900. Elmira, NY.

- Heller, A. A. 1898. Catalogue of North American Plants North of Mexico: Exclusive of the Lower Cryptogams. No publisher listed.
- Long, C. K., L. B. Kass and A. Kowalski. 1987. The contributions of Thomas Francis Lucy to the flora of central New York. Amer. J. Bot. 74(5): 676. Abst. #228.
- Patterson, H. N. 1892. Patterson's Numbered Check-list of North American Plants North of Mexico. H. N. Patterson, Pub., Oquawka, IL.
- POTT, W. S. A. 1939. Annual report of the President for the eighty-fourth year. Elmira College. Elmira, NY.
- SMITHSONIAN INSTITUTION ARCHIVES. RECORD UNIT 221. UNITED STATES National Museum. Division of Plants, 1886–1928 Records. Box 14. "Flora of the Upper Susquehanna" Flyer, December, 1899.

Weaver, E. A. 1890. Register of the Chi Phi fraternity. New York.

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